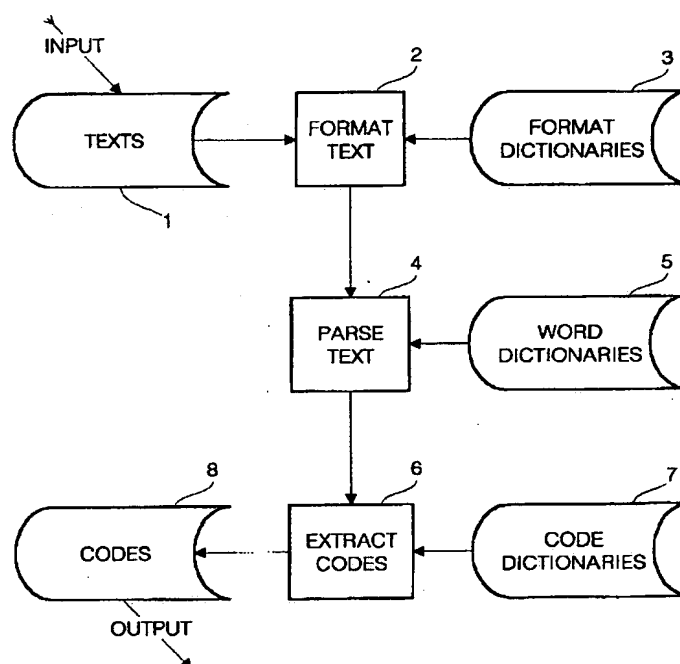


### REMARKS

Claims 1, 3, 4, 8, 9, and 11-15 are rejected under 35 U.S.C. 102(e) given Ryan (U.S. Patent No. 5,809,476) ("Ryan"). Claims 2, 6 and 10 are rejected under 35 U.S.C. 103(a) given Ryan in view of Zhilyaev (U.S. Patent No. 6,137,911 ("Zhilyaev")). Claims 5 and 7 are rejected under 35 U.S.C. 103(a) given Ryan in view of Zhilyaev and Li (U.S. Patent No. 5,774,588) ("Li"). The applicant respectfully traverses these rejections and requests reconsideration.

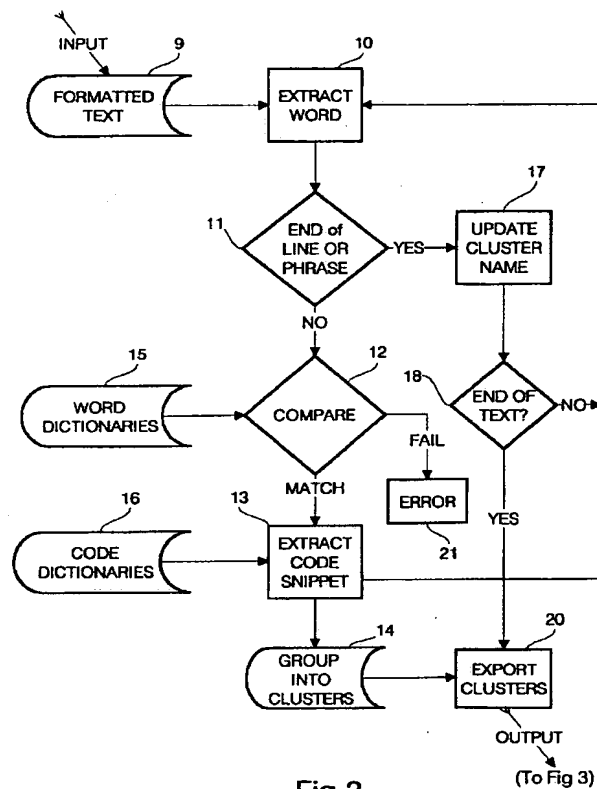
As all of the claims have been rejected with Ryan serving as the only or as a primary reference the applicant believes it would be helpful to first briefly describe and characterize Ryan's teachings.

Ryan provides a system to convert information, such as medical information, into corresponding representative codes. For example, the words "femur at the knee" can be represented, according to Ryan, by the corresponding code "!B@C." Ryan's FIG. 1 provides a general overview of his teachings (with FIG. 1 being reproduced below for the convenience of the reader).



Ryan begins with inputting narrative text (gleaned, he suggests, from keyboard entry, speech recognition, and so forth). Ryan suggests no constraints with respect to the nature or form of that narrative entry nor does Ryan offer any thoughts with respect to conducting speech recognition in a successful manner. Such details are left to the imagination of the reader. Instead, Ryan presumes provision of accurate narrative text, however obtained.

Ryan then formats that narrative text to remove punctuation marks and plural or tense modifiers. Format dictionaries (3) are used to facilitate this formatting. The resultant formatted narrative text is then parsed (at block 4) to separate each individual word to permit comparison of each parsed word with available dictionary entries (5). Some pertinent additional details regarding this process appear in FIG. 2 (also reproduced below for the convenience of the reader).



In particular, Ryan compares (12) each parsed word against the entries in his word dictionaries (15). When no match occurs, an error condition (21) results. When a match does occur, the corresponding code for that word is “extracted” from a code dictionary (16).<sup>a</sup>

Ryan then proceeds to group his extracted codes into related groups (to capture whole thoughts or expressions). Ryan also then examines each such group, referred to by Ryan as a “cluster,” to ensure that the contents of that group are complete. In particular, Ryan requires that each such group comprise at least one code from a group of codes as are used for anatomical modifiers, at least one code from a group of codes as are used for clinical modifiers, and at least one code from a group of codes as are used for “side information.”<sup>b</sup> When a group is found to be incomplete, Ryan provides some suggestions for how the content requirements might be met.

Ryan is therefore seen to teach a translation mechanism that begins with narrative text and that outputs a completely coded translated output, where that translated output is comprised of codes that are themselves comprised of the codes that represent the individual parsed words of the original text. It is Ryan’s intent and purpose to convert and translate an original narrative sentence such as, “This patient requires a left to right shunt” into a code such as, “AxL/R\$.”

At the outset, it may be observed that Ryan’s concerns and approach are considerable different from those addressed and set forth in the present application. Ryan is unconcerned with *how* he obtains his narrative text, for example, whereas in the present case concerns regarding the accuracy, speed, and ease-of-use that typically surround speech recognition are important issues. This difference, alone, leads to numerous operational differences between the present claims and Ryan’s teachings.

For the sake of brevity, however, the applicant is content here to note one particular significant difference between the present application and Ryan. This difference stems from

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<sup>a</sup> In fact, at this point, Ryan tends to refer to the code as a “code snippet,” as he anticipates combining this code snippet with other related code snippets to form, in their aggregate, a resultant code for a plurality of related words as comprise, for example, a phrase, statement, or sentence.

<sup>b</sup> Where “side information” refers to a side of the human body as in, for example, “right” or “left” side.

the fact that, while Ryan is unconcerned with the source of his original narrative text<sup>c</sup> the present application presumes that the person providing the speech to be recognized is present and actively interacting with the input mechanism itself. This difference becomes clearly manifest in the applicant's requirement that this person be able to interact with the process by providing spoken commands to that process. In particular, the applicant provides the user with an ability to navigate the data entry process by accommodating navigational commands.

To illustrate, the applicant teaches that "Navigation for data entry in the user interface is done by verbally selecting a structure of interest or finding a structure of interest in the menu system or summary viewer . . . ."<sup>d</sup> As a further illustration, the applicant provides an example wherein, "At this point the phrase 'Navigate to mitral valve' is uttered by the user. The results are illustrated in FIG. 4. The system recognized that 'navigate to mitral valve' was the appropriate command (indicated in the large panel 20 at the bottom), and executed that command to set the current Finding Group to Mitral Valve."<sup>e</sup> To support this active role on the part of the user, the applicant provides for navigational commands that correspond to particular contexts and workflows. Ryan makes no such provision.

For example, claim 1 provides for "developing a series of contexts, each context comprising a series of *navigational commands* for populating a selected series of data items of the main database . . . ."<sup>f</sup> Ryan makes no provision for commands of any type and in particular has no navigational commands as described.

Somewhat similarly, independent claim 8 provides for, "defining a workflow for populating a selected set of data items in the main database, each workflow providing custom knowledge comprising a series of *navigational commands* and a context identifier . . . ."<sup>g</sup> and independent claim 13 provides for, "a context identifier for establishing a workflow for information processing of a series of *navigational commands* for populating a selected series of data items in the main database . . . .". Again, Ryan makes no provision for commands of

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<sup>c</sup> To the point, in fact, that the originator of the narrative text need not even be present or aware of Ryan's code translation processing.

<sup>d</sup> Page 6, lines 22-24.

<sup>e</sup> Page 9, lines 30-34.

<sup>f</sup> Emphasis provided.

<sup>g</sup> Emphasis provided.

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this sort, let along navigational commands that correlate as described to a specific workflow context.

The applicant therefore respectfully submits that Ryan cannot be said to anticipate the recitations of these claims. Therefore, independent claims 1, 8, and 13 are distinguished from Ryan and may be passed to allowance.

The remaining claims are ultimately dependent upon one of these independent claims. In addition, these claims introduce additional content that, particularly when viewed in context with the claim or claims from which they depend, constitutes additional incremental patentable subject matter. For all these reasons the applicant respectfully submits that these dependent claims are in suitable form to support allowance.

There being no objections to or rejections of the claims, the applicant respectfully submits that claims 1-15 may be passed to allowance.

Respectfully submitted,

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